

STATE GOVERNMENT ENERGY COMMITTEE FY2017 WORK PLAN

In Response to Executive Order [2016-3](#) (Supersedes 2011-1)

Introduction

The State Government Energy Committee (SGEC) developed the following work plan for FY2017 to coordinate the efforts of the state energy staff efforts to meet the directives of NH *Executive Order 2016-3*, which was issued to further the State of New Hampshire's progress towards reducing fossil fuel energy consumption. The work plan identifies the agencies and staff that will undertake specific actions and proposes the timing for implementation and completion.

State Energy Management Background

Agency and Staff Coordination

The SGEC is made up of representatives appointed from the Department of Administrative Services (DAS), the Department of Environmental Services (NHDES), the Public Utilities Commission, the Department of Resources and Economic Development, the Department of Safety, the Department of Transportation, the Office of Energy and Planning (OEP), and all other Agencies and Departments with significant opportunities for energy management, and co-chaired by the Commissioner of NHDES and the Director of OEP. The SGEC shall advise the State Energy Manager and State Fleet Manager regarding improving the energy management within state buildings, operations and fleets; and develop and promote policies to expand the State's lead-by-example efforts.

Note: Language taken from Executive Order 2016-3 directive #1.

Performance & Goals

- The State of New Hampshire owns more than 500 buildings and occupies 700 additional buildings, and operates a passenger vehicle fleet of approximately 2,000 vehicles, making it the largest energy user in New Hampshire with transportation, heating, cooling, and electricity costs greater than \$27 million annually in 2015.
- Since 2005, New Hampshire state government has reduced its fossil fuel energy use by 24 percent per square foot, while avoiding nearly \$10 million in state energy costs.
- The State is expected to avoid nearly \$87 million in fossil fuel energy expenditures over the next 20 years as a result of a series of innovative energy performance contracts overseen by the Department of Administrative Services.
- The State has also reduced its' passenger vehicle-miles traveled by approximately 2.4 million miles since 2009, avoiding the purchase of an estimated 137,000 gallons of fuel and avoiding approximately \$359,000 in fuel costs since that time, while reducing carbon pollution emissions by 1,200 metric tons.
- The State has set goals to:
 1. Reduce aggregate fossil fuel energy use¹ across all State-owned facilities on a square foot basis, as compared to a 2005 baseline, by:
 - 30 percent by 2020; and
 - 40 percent by 2025; and
 - 50 percent by 2030.

NOTE: Executive Order 2016-3 directive #2.

2. Reduce greenhouse gas emissions from the state passenger vehicle fleet by 30 percent over a 2010 baseline on a metric ton basis by 2030.

NOTE: Executive Order 2016-3 directive #3.

¹ The use of the terminology "fossil fuel energy use" is in keeping with the goals established by SB73 (2010 Session) that are in RSA 21-I:14-c, <http://www.gencourt.state.nh.us/rsa/html/i/21-I/21-I-14-c.htm>.

Detailed Work Plan Description

The Work Plan is divided into three sections: Cross-Cutting Options; Fleet Energy Management; and Building Energy Management. While the sectors are largely separated, implementing each plan with a similar, high level of commitment is critical to continuing the State's progress made in managing fossil fuel energy use in order to avoid energy costs and reduce environmental impacts. Further, in the years to come, it is expected that, as the electric vehicles and charging technology and air source heat pumps continue to advance and become more widespread, that the building and fleet sectors will interact more as they access the same energy supplies.

Cross Cutting Activities

1. The State Energy Manager and the State Fleet Manager shall report to the Governor on an annual basis, as an appendix to the Annual Energy Report, regarding the progress on implementing the policies and the measures identified herein.

Implementing Parties: DAS State Energy Manager and Fleet Manager with support from DES (Tech Services) and OEP

Target Completion Date: November 2016 and annually thereafter.

NOTE: No completion date specified in [Executive Order 2016-3](#) directive #14 – BUT this is a revision of directive #12 under [Executive Order 2011-1](#).

2. The SGEC shall develop outreach materials relative to improving energy conservation in buildings and fuel-efficient driving behaviors and disseminate that information to state employees via avenues deemed appropriate by the SGEC.

Implementing Parties: SGEC Communications Team

Target Completion Date: Ongoing

NOTE: No date specified in Executive Order 2016-3 directive #13.

Fleet Energy Management

1. Develop performance metrics for specific vehicle classes that apply to all Agencies and Departments to ensure compliance with Goal 2. Agencies and Departments will report their progress toward achieving those metrics in their FY18 energy conservation plans.

Implementing Parties: State Fleet Manager (lead) with support from DES (Mobile Sources Section) and OEP

Target Completion Date: December 30, 2016

NOTE: Date specified in Executive Order 2016-3 directive #4.

2. Pursue opportunities to procure electric vehicles (EV) and plug-in hybrid vehicles for use in the state fleet as well as identify state offices with more than 50 employees and evaluate the potential for installation of EV charging infrastructure for use by employees and visitors, with the energy cost associated with such charging to be borne by the users of said equipment.

Implementing Parties: State Fleet Manager and DES Mobile Sources Section

Target Implementation Date: December 30, 2016

NOTE: No date specified in Executive Order 2016-3 directive #11. The date proposed by staff is for efforts, which are expected to last a while, to begin.

3. Procure and install EV charging infrastructure at identified locations for use by employees and visitors.

Implementing Parties: State Fleet Manager and DES Mobile Sources Section

Target Implementation Date: December 30, 2017

NOTE: No date specified in Executive Order 2016-3 directive #11. This date is based on the assumption that the state will bear the burden of cost. That will need to be included in the FY18 budget which means we can't begin contracting for purchasing and installation until the start of FY18. It gives us 6 months to implement once the funds are available.

4. Update the State's Clean Fleets Program (CFP) criteria for approval by the SGEC by no later than October 1st annually. The CFP shall include:
 - a. A Clean Fleet Approved Vehicle List that includes vehicles that meet a minimum fuel economy requirement and a minimum emissions rating for new passenger vehicle and light truck purchases.
 - b. A waiver procedure for requesting the purchase of a vehicle not on the Clean Fleets Approved Vehicle List.
 - c. A minimum fuel economy and emissions ratings for on-road medium and heavy-duty vehicles based upon recommendations by the SGEC.
 - d. A procedure to ensure that the appropriate vehicle is selected for the intended use of the vehicle.
 - e. A method by which the total cost of ownership of a specific vehicle is to be calculated, with such calculation including a cost of carbon factor. SGEC shall provide recommendations on the cost of carbon factor to be used.
 - f. Vehicle purchase requirements that ensure compliance with the United States Energy Policy Act of 1992 (EPAct), which mandates that a certain percentage of new vehicles purchased in certain areas of the state be alternative fuel vehicles.
 - g. A motor vehicle "Best Management Practices" guide, inclusive of the State's anti-idling policy and additional measures to promote vehicle fuel conservation including, but not limited to: carpooling, teleconferencing, and improved preventive maintenance.

Implementing Parties: State Fleet Manager and DES Mobile Sources Section

Target Completion Date: October 1, 2016 and annually thereafter.

NOTE: Date specified in Executive Order 2016-3 directive #12.

1. Ensure that every Agency and Department complies with CFPs requirements.

Implementing Parties: State Fleet Manager and DES Mobile Sources Section

Target Completion Date: Ongoing

NOTE: No date specified in Executive Order 2016-3 directive #12 – implied.

Building Energy Management

Building Energy Project Funding

5. Work to modify RSA 21-I:19-f to allow energy rebates to go into the Energy Efficiency Fund. Potentially, include allowing funds obtained through participation in Demand Response programs to be redistributed in proportion to how they were earned.

Implementing Parties: State Energy Manager (lead) with support from DES (Tech Services) and OEP

Target Completion Date: June 30, 2017

NOTE: Not specified in Executive Order 2016-3. Determined to be supportive of meeting goals and objectives of Executive Order 2016-3.

Building Energy Management Planning

6. State energy staff will work with every Agency and Department, which have more than 15 employees or that occupies more than 10,000 sq. feet of space, to:
 - o Identify an Energy Coordinator who will be responsible for tracking implementation of this Executive Order and who will serve as the contact person for dissemination of information on reducing energy and water use.

Implementing Parties: State Energy Office

Target Completion Date: December 30, 2016

NOTE: No date specified in Executive Order 2016-3 directive #5. The date was selected by staff and is considered achievable.

- o Include a behavior component in the energy conservation plans and provide guidance on (develop template) what can be done and how accomplish it.

Implementing Parties: State Energy Office with support from DES (Tech Services) and OEP

Target Completion Date: For release at the Annual State Energy Conference 2017

NOTE: Not specified in Executive Order 2016-3. Determined to be supportive of meeting goals and objectives of Executive Order 2016-3.

- o Submit an annual Energy Conservation Plan required by RSA 21-I:14-c.

Implementing Parties: State Energy Office with support from DES (Tech Services) and OEP

Target Completion Date: October 15th of each year

NOTE: No date specified in Executive Order 2016-3 directive #5, the date is specified in RSA 21-I:14-c².

Building Energy Performance

7. Develop a metric for measuring and tracking building energy use on a square foot basis, which normalizes for annual variations in energy consumption due to weather.

Implementing Parties: State Energy Manager (lead) with support from DAS (Energy Office & DPW), DES (Tech Services) and OEP

Target Completion Date: March 30, 2017

NOTE: No date specified in Executive Order 2016-3 directive #2. The date was proposed by staff to be used in FY17 Energy Report due in November 2017.

8. Develop performance metrics for specific building categories that apply to all Agencies and Departments to ensure compliance with Goal 1. Agencies and Departments will report their progress toward achieving those metrics in their FY18 energy conservation plans.

Implementing Parties: State Energy Office with support from DPW, NHDES (Tech Services) and OEP

Target Completion Date: June 30, 2017

² <http://www.gencourt.state.nh.us/rsa/html/i/21-I/21-I-14-c.htm>

NOTE: The date specified in Executive Order 2016-3 directive #4.

Building Energy Standards

9. Develop language for each Agency and Department to include, in their requests for proposals for leased space, a call for bidders to submit a building energy score and/or a building energy audit.³

Implementing Parties: State Energy Manager (lead) with support from DAS (Energy Office) and OEP

Target Completion Date: January 1, 2017

NOTE: No date specified in Executive Order 2016-3 directive #7– Date proposed by staff to align with next calendar year.

Staff lead anticipated to differ from many of the other projects contained herein.

10. Review the State of NH high-performance design standards in RSA 155-A: 13 - Building Requirements for State Funded Buildings to determine whether it needs to be updated.

Implementing Parties: NHDES (Tech Services) the Division of Public Works (Leads).

Required: Consult with the Division of Historic Resources, the Office of Energy and Planning, and the Community College System.

Final approval by the Commissioners of the NHDES and DAS.

Target Completion Date: Reviewed annually.

NOTE: Date specified in RSA 155-A: 13.

11. Develop a second-tier high performance, energy efficient, sustainable design standard for any project managed by the Division of Public Works that affects fewer than 25,000 square feet or costs less than \$1,000,000.

In developing the high performance, energy efficient, sustainable design standard and the second-tier standard, provisions of current International Energy Conservation Codes energy codes and ASHRAE Standard 189.1 shall be considered.⁴

Implementing Parties: NHDES the Division of Public Works (Leads).

Required: Consult with the Division of Historic Resources, the Office of Energy and Planning, and the Community College System.

Final approval by the Commissioners of the NHDES and DAS.

Target Completion Date: January 1, 2017 and reviewed annually.

NOTE: Date specified in Executive Order 2016-3 directive #8.

12. Develop tools and messaging necessary to support Agency and Departments capital improvement project requests, which will require the submission of an analysis of energy cost savings or additions associated with the project.⁵

Implementing Parties: DAS

³ The building energy score or energy audit will not impact the ability of an Agency or Department to lease the space. Energy ratings will be a consideration in the decision, however, other factors related to location, availability, and program delivery needs should not be discounted due to the energy rating of the potential leased space.

⁴ The second-tier standard shall not apply to structures or projects specified in RSA 155-A:13, Paragraph II (b), (d), (e), (f) or (g).

⁵ This information shall be included as a separate line item on the submission form and shall not be combined with other operational cost savings or additions.

Target Completion Date: July 1, 2017

NOTE: Executive Order 2016-3 directive #10 specifies that this analysis is to be utilized in FY20/21 budget cycle. Date proposed by staff to align with this budget cycle.

Energy Procurement

13. The ability to provide a percentage of electricity from renewable sources shall be considered when selecting an electric provider in addition to the criteria listed in RSA 21-I:17-b, relative to the purchase of electricity by competitive bidding.

Implementing Parties: State Energy Manager

Target Completion Date: Annually

NOTE: No completion date specified in [Executive Order 2016-3](#) – BUT this is a continuation of directive #7 under [Executive Order 2011-1](#).

14. Develop a policy to deal with RECs, should the State take a stance on selling/retaining them.

Implementing Parties: State Energy Office and NHDES (Tech Services)

Target Completion Date: September 1, 2017

NOTE: Not specified in Executive Order 2016-3. Determined to be supportive of meeting goals and objectives of Executive Order 2016-3.

15. Develop an approach to make PPAs work in state facilities.

Implementing Parties: State Energy Office and NHDES (Tech Services)

Target Completion Date: September 1, 2017

NOTE: Not specified in Executive Order 2016-3. Determined to be supportive of meeting goals and objectives of Executive Order 2016-3.

Energy Database

16. Work with utilities and other energy suppliers to obtain uploadable electronic energy use and billing data.

Implementing Parties: State Energy Office with support from OEP in partnership with the Local Energy Solutions Working Group.

Target Completion Date: TBD

NOTE: Not specified in Executive Order 2016-3. Determined to be supportive of meeting goals and objectives of Executive Order 2016-3.

17. Every Agency and Department that is financially responsible for utility expenses shall utilize the utility management tool approved by the State Energy Manager, in consultation with the SGEC, to track its energy and water consumption and shall benchmark the energy and water use of each of its facilities in accordance with the recommendations of the SGEC.

Implementing Parties: State Energy Office with support from OEP

Target Completion Date: Ongoing

NOTE: No completion date specified in [Executive Order 2016-3](#) directive #6– BUT this is a continuation of directive #4 under [Executive Order 2011-1](#).

18. The State will develop the capacity to track the energy associated with leased spaces in the State's energy database.⁶

Implementing Parties: State Energy Office with support from DAS (Energy Office) and OEP

Target Completion Date: July 1, 2017

NOTE: Date specified in Executive Order 2016-3 directive #7.

DRAFT - FOR DISCUSSION PURPOSES ONLY

⁶ The energy performance targets established for state owned buildings will not apply.